AUTOMOBILE ACCIDENTS IN THE YEAR FOLLOWING HIGH SCHOOL : THE PREDICTIVE VALUE OF 377 UNOBTRUSIVE VARIABLES

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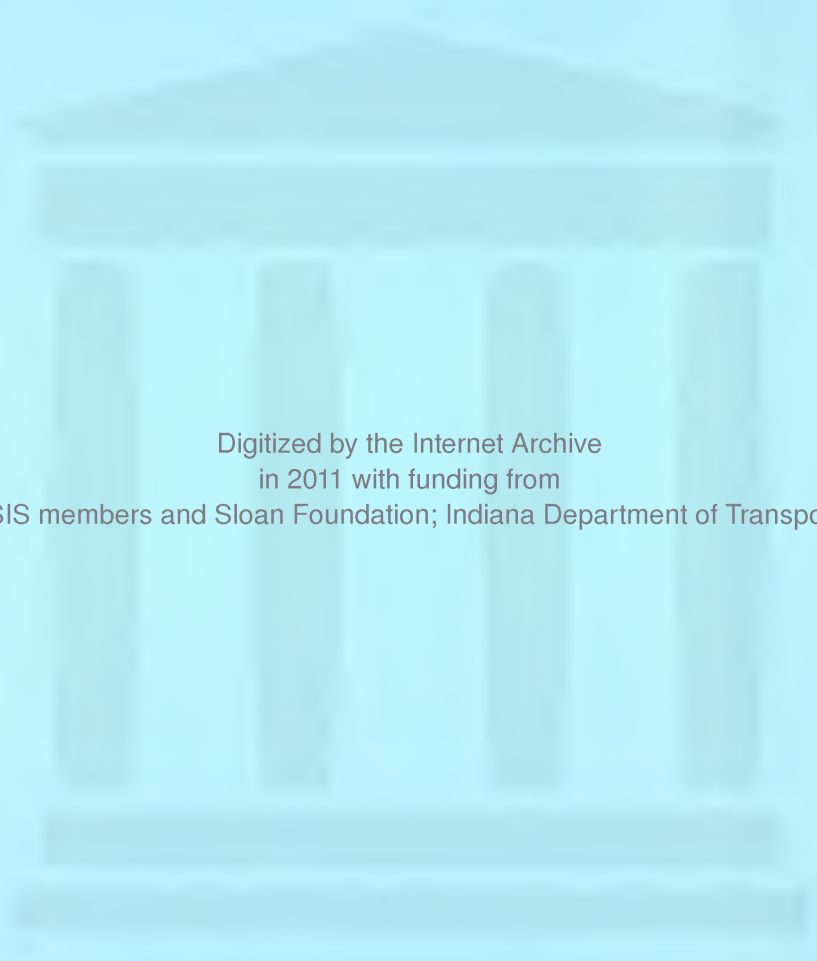
BY

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JHRP

JOINT HIGHWAY RESEARCH PROJECT
PURDUE UNIVERSITY AND
INDIANA STATE HIGHWAY COMMISSION

Progress Report

AUTOMOBILE ACCIDENTS IN THE YEAR
FOLLOWING HIGH SCHOOL: THE PREDICTIVE
VALUE OF 377 UNOBTRUSIVE VARIABLES

TO: J. F. McLaughlin, Director
    Joint Highway Research Project

November 18, 1969

File No. 8-5-11

FROM: H. L. Michael, Associate Director
      Joint Highway Research Project

Project No. C-36-59K

The attached Progress Report "Automobile Accidents in the Year Following High School: the Predictive Value of 377 Unobtrusive Variables" is submitted as the first report on the special research project approved by the JHRP Board on the relationship of driver education to highway safety. The research is being conducted by Professor William Asher, Departments of Education and Psychology, and Miss Beverly Dodson, Research Assistant.

Additional research is in progress on the Indiana students in the sample and will be reported at a later date.

The Report is presented to the Board for information and for the record.

Respectfully submitted,

Harold L. Michael

Harold L. Michael
Associate Director

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Progress Report

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VALUE OF 377 UNOBTRUSIVE VARIABLES

by

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and

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Joint Highway Research Project

File No. 8-5-11
Project No. C-36-59K

Purdue University
Lafayette, Indiana
November 18, 1969

AUTOMOBILE ACCIDENTS IN THE YEAR FOLLOWING HIGH SCHOOL:
THE PREDICTIVE VALUE OF 377 UNOBTRUSIVE VARIABLES

ABSTRACT

Automobile accidents in the post high school year were studied for 377 social-psychological variables on a U. S. sample of 7,99... Forty of these variables for the males and 34 for the females were found to be predictors of accidents. These tended to be variables correlated with the socio-economic-education dimension, high access to cars, and poor acclimitization in school. Driver training courses do not reduce accidents. Higher socio-economic-education students take driver training. Indiana's high school students are very similar to the students in the rest of the United States.

INTRODUCTION

Automobile accidents are a major problem of our society, and
youngsters in their latter teens are at a particularly vulnerable
age for these catastrophes. Thus analysis of data and development
of theory about automobile accidents for these drivers is eminently
desirable, particularly if it can be done for major populations
at a minimum cost.

Project TALENT (Flanagan, et al, 1964) collected information
on some 500 variables on a sample of 425,000 high school students
in the United States in 1960. Each year since, they collected
additional information on each class one year after they were
scheduled to graduate from high school and thereafter five years
following their scheduled graduation. Fortunately for those
concerned with reducing accidents in these age groups, TALENT's
first follow up study asked a question about accidents during
the past year. Unfortunately, TALENT had no funds to analyze
this portion of the data and, even worse ultimately had to drop
this question from further followup studies. Death, suffering,
and damage continue yearly when the expenditure for research
of the cost of one major accident per year might well have gained
enough insights to repay the research expenses hundreds or
even thousands of times.

Meanwhile eight years of invaluable data have not been
collected and seven years passed before the first writer, using
funds from the U. S. Office of Education for training under-
graduate educational researchers, was able to buy some data from

the bank for analysis. One wonders if society (1) is really interested in the problem of automobile accidents, and (2) is even somewhat rational.

Further statements, literature reviews, and theory about the importance now of the driver as the cause of most accidents, the ineffectiveness of driver education, and methodological problems of predicting accident criteria, are found in the report of the analysis of the first data (Asher and Dodson, 1969).

This paper reports the analysis of the remaining variables in the TALENT Data Bank particularly with respect to accidents, driver training, and the Indiana sample.

PROBLEM

The data used in this study were secured from Project TALENT (Flanagan, et al, 1964), a widely publicized research project supported by the Office of Education. Project TALENT offers data on about 400,000 high school students reasonably representative of a U. S. sample, who underwent a two-day period of paper and pencil testing in the spring of 1960. Some variables have been made available by the data bank (1965), including the results of numerous aptitude and achievement tests, an interest inventory, a student activities inventory, and a rather extensive student information blank.

The criterion variable, whether or not the subjects had had a significant accident in the past year, was obtained from a

one-year follow-up study. Basically the problem was to determine

which of nearly 400 Project TALENT socio-psychological variables

obtained in 1960 were related to the criterion. These variables

might be termed unobtrusive, possible accident-predicting

variables, since the data were collected prior to the occurrence

of the accidents.

As was noted, about 500 variables are available from Project

TALENT. In an earlier study ("The Prediction of Automobile

Accidents Following the Senior Year in High School", Asher,

& Dodson, 1969) the writers studied some 100 TALENT variables

and their relationship with the accident criterion. The present

study, using the same methods as before, utilized most of the

remaining 400 TALENT variables.

Of particular interest were two variables; namely whether

the student took driver training, and whether the student was

from Indiana. Thus, this study dealt with three major questions;

1. Do students who elect to take driver training differ
   in anyway (or ways) from students who did not take
   driver training?

2. Are Indiana high school seniors typical of high
   school seniors across the United States?

3. The primary question; which of some 400 variables
   are of value in predicting significant automobile
   accidents in the year following high school?

METHOD

A Project TALENT (Flanagan, et al, 1962) sample of male and
female subjects who were seniors in high school during 1960 was
selected. The criterion for grouping was variable #30 on the
twelfth-grade one-year follow-up study (Flanagan, et al, 1966).
which in May, 1961, was sent to all students who had participated
in TALENT's data collection in 1960 as high school seniors.
Variable #30 read: "Were you the driver in an automobile accident
involving bodily injury or more than $100 property damage since
June, 1960?" One hundred percent of the students who responded
"yes" to the above question were selected to represent the
"accident group." This group was compared with a 10% sample
of those students who reported having no accidents within the
past year. The n's for the non-accident and accident groups
were 4892 and 3104 respectively, giving a total n of 7996
subjects. In the accident group there were 2255 boys and 849
girls. Thus the total sample of 7996 consisted of 3560 girls
and 4436 boys.

Three hundred seventy-seven (377) variables from the
Project TALENT Data Bank (Flanagan, et al, 1965) were used
in addition to the criterion variable of having or not having
an accident in the past year. Such variables included the
results of information tests in literature, science, mechanics,
and home economics. Numerous aptitude and achievement test
results were included in the areas of language, creativity,

abstract reasoning, visualization in two and three dimensions,
mathematics, and numerical checking. Items from the Student
Information Blank (SIB) furnished data on the students'
backgrounds and plans, school and study habits, parents'
financial situation, students' health, plans for marriage, college,
and careers (See Flanagan, et al, 1964, pps. 5-6 to 5-35 for
all 394 SIB items and their numbers). In addition there were
two composite scores, a socio-economic-educational (SEE) index
and an intelligence score.

Correlation analysis was chosen for its convenience. But,
before these analyses could be run on the TALENT variables,
several measurement problems needed to be resolved. Examination
of specific items from the Student Information Blank (Flanagan,
et al, 1964, pps. 5-6 to 5-35) revealed that in some items,
responses were not coded in a single dimensionality. For example,
quest #173 is cited:

> Please make the best estimate you can of your family's
> total income for last year (1959). Include money
> earned by both parents and anyone else in the house-
> hold who worked.
>
> A. Less than $3000
> B. $3000 to $5,999
> C. $6000 to $8,999
> D. $9000 to $11,999
> E. $12,000 or more
> F. I can't estimate this.

The responses A through F were coded 1 through 6. Obviously
response F was not a component of the continuum established in
responses A through E. Consequently, in order that correlation
analysis would be meaningful, response F was deleted. Also,

in all items it was necessary to delete codings that indicated that the student made no response to the item.

The possible responses for item #296 from the SIB, "Did you take driver training in school?" were as follows:

    A. Yes
    B. No, this course is not available.
    C. No, although the course was available.
    D. No, but I expect to take the course in a later grade.

The responses to this question were dichotomized. It was felt that a comparison of response "A" and "C" would be most meaningful; consequently responses "B" and "D" were deleted. (Since the subjects in our study were seniors in high school, only a negligible number responded "D.") Further the comparison of response "B" with response "A" had been analyzed with respect to accidents in a prior study (Asher & Dodson, 1969). Eighteen TALENT items from the SIB could not be used in our correlational analysis because responses to the items were not amenable to rank order arrangement. An example is SIB #211, in which the student is given a list of 36 alphabetically arranged occupations and asked to mark the one he expects to make his career. This was the major reason for the reduction of the some 400 remaining TALENT variables to the number analyzed (378). In order to control for sex differences, data from boys and girls were run separately.

ANALYSIS

As was indicated, the most convenient analysis to reduce
this rather large quantity of data, a matrix of order 378 x 7996,
was via missing data product moment correlations using the BMD 03D
program (1964). With only minor losses of information the
unidimensional aspects of the coding were retained. Thus
standard Pearson correlations, phi coefficients, and point
biserial correlations resulted. In addition, means and standard
deviations were computed for the variables, and the number of
non-missing data entering into the correlations was computed.
All of these correlations or their functions have known standard
errors and can be tested for a significant difference from zero.
Guilford's (1956) Table D was used to determine the significance
of most of the correlations. The five percent level was used.

RESULTS

Of the 377 variables analyzed in this study 40 variables
for the males showed significant relationships with the accident
criterion, ten of these at the one percent level. For the females
34 variables were related to accidents, eight at the one percent
level. Both of these sets of results are considerably greater
than chance expectations; however, the magnitude of the relation-
ships is not great. It is obvious that our hypothesization was
better than we might have anticipated when we selected the first
100 or so variables from the TALENT Data Bank for study. In

general those relationships are larger than these. Only one of the new variables (several marker variables were repeated) had a correlation of greater than .10 for the boys and one for the girls. Indeed, if the sample had not been so huge, many of these relationships would not have been detected at all.

Table 1 is a list of the variables for which significant relationships were obtained. The list of variables which were not significant can be inferred comparing the variables listed in the TALENT Data Bank manual (Flanagan, et al, 1965) and the list of the Student Information Blank variables in Flanagan, et al (pps 5-6-5-35, 1964). This list includes perhaps a majority or more of all the reliable social-psychological variables which can be assessed via paper and pencil tests in a reasonable time span.

Again one variable stands out in its inability to predict significant automobile accidents, driver training. The correlations this time were -.009 for boys and -.033 for girls, with $\underline{n}$'r of 3928 and 3271 respectively. Even with these sample sizes, drawn to maximize the possibility of significant results, in an age group where auto accidents are prevalant, no differences were found.

In fact very few correlations were found in these variables. (See Table 2) Driver training seems to be taken by those who learn to drive later than their peers especially for girls.

Table 1[a]

Significant Correlates With Accidents

(1 = non-accident group   2 = accident group)

Project TALENT Data Bank Variable Number	Variable	Correlation with Criterion Variable	
		Male	Female
Student Information Blank Number			
23	Mechanical or auto repair (1 = very often 5 = never)	-.115 n = 4270	-.079 n = 3416
31	Playing golf or tennis; swimming (1 = very often 5 = never)		-.083* n = 3442
46	Other (summer) work for pay (1 = very often 5 = never)	-.082* n = 4277	
47	Percent of spending money from regular allowance (1 = 0 percent 5 = 100 percent	-.067 n = 4285	
51	Age at first date (1 = 12 or younger 6 = never dated)	-.083 n = 4219	-.100* n = 3389
55	Evenings a week you go out for fun and recreation during the school year. (1 = less than one 6 = six or seven)	.075 n = 4203	.076 n = 3367
68	My grades reflect my ability fairly accurately. (1 = almost never 5 = almost always)	-.066 n = 4190	
69	I make sure that I understand what I am doing before I start an assignment (1 = almost never 5 = almost always)	-.062 n = 4209	-.062 n = 3373

Table 1 (contd)

Project TALENT Data Bank Variable Number	Variable	Correlation with Criterion Variable	
		Male	Female
Student Information Blank Number			
71	Lack of interest in my school work makes it difficult for me to keep my attention on what I am doing. (1 = almost always 5 = almost never)	-.087* n = 4204	-.074 n = 3376
73	Failure to pay attention in class has caused my marks to be lower. (1 = almost always 5 = almost never)	-.069 n = 4206	
75	I do my assignments so quickly that I don't do my best work. (1 = almost always 5 = almost never)	-.073 n = 4194	-.063 n = 3380
76	I have missed assignments...because I was not paying attention (1 = almost always 5 = almost never)	-.095* n = 4204	
77	My teachers have criticized me for turning in a sloppy assignment. (1 = almost always 5 = almost never)	-.079 n = 4206	
78	Unless I really like a course, I do only enough to get by. (1 = almost always 5 = almost never)	-.087* n = 4203	
80	In class I can't seem to keep my mind on what the teacher is saying. (1 = almost always 5 = almost never)	-.072 n = 4220	
81	I get behind in my school assignments. (1 = almost always 5 = almost never)	-.079 n = 4219	-.065 n = 3388

Table 1 (contd)

Project TALENT Data Bank Variable Number	Variable	Correlation with Criterion Variable	
		Male	Female
Student Information Blank Number			
88	I keep up to date on my assignments by doing my work every day. (1 = almost never 5 = almost always)	-.075 n = 4151	-.070 n = 3348
96	How many days were you absent from school in the last school year? (1 = none 6 = twenty or more days)		.072 n = 3348
108	My grades in foreign language have been: (1 = all A's 6 = mostly D's or below)	.062 n = 2989	.062 n = 2431
109	My grades in history and social studies courses have been: (1 = all A's 6 = mostly D's or below)		.062 n = 3333
110	My grades in English courses have been: (1 = all A's 6 = mostly D's or below)	.066 n = 4115	
113	My grades in all courses starting with ninth grade have been: (1 = all A's 6 mostly D's or below)	.072 n = 4091	
133	Father's responsibility for money and property on his job (1 = not in charge of money or property 4 = a great deal of money, merchandise or property)	.062 n = 3055	.075 n = 2228
142	Father's activity in a business or professional association (1 = extremely active 6 = not a member)	-.068 n = 3954	-.066 n = 3136

Table 1 (contd)

Project TALENT Data Bank Variable Number	Variable	Correlation with Criterion Variable	
		Male	Female
170	Building in which you live (1 = a one family house 5 = a rooming house, hotel, or trailer)		-.072 n = 3179
171	If your family is renting, how much is rent per month? (1 = less than $60 6 = have bought or are buying a home)	.073 n = 4051	
172	Value of present home (if bought or is buying): (1 = under $6,000 5 = more than $22,000)	.081* n = 3311	
173	Family's total income for last year (1959). (1 = less than $3,000 5 = $12,000 or more)	.074 n = 3262	.080 n = 1965
180	Number of mechanics, electronics, aviation or automobile magazines received regularly at home? (1 = none 6 = five or more)	.072 n = 4156	
190	Number of the following in home: automatic washer, automatic clothes dryer, electric dishwasher, electric or gas refrigerator, vacuum cleaner, home food freezer (1 = none 6 = five or six)	.077 n = 4190	.110* n = 3370
191	Number of the following in home: telephone, television set, radio, phonograph (1 = none 5 = four)	.063 n = 4176	.068 n = 3362

Table 1 (contd)

Project TALENT Data Bank Variable Number	Variable	Correlation with Criterion Variable Male	Female
Student Information Blank Number			
193	Number of the following in home: musical instruments, hi-fi or stereophonic set, classical records art equipment, photo developing equipment. (1 = none 6 = five)		.075 n = 3354
194	Number of the following in home: tennis racket, golf clubs, hunting equipment, skis, fishing equipement. (1= none 6 = five)	.095* n = 4182	.090* n = 3373
196	How many hand tools are in your home? (1 = five or less 6 = 26 or more)	.067 n = 4181	.069 n = 3552
197	How many electrically operated power tools are in your home? (1 = none 6 = five or more)	.065 n = 4179	.072 n = 3358
225	Number of rooms in home (1 = one 12 = seventeen or more)	.077 n = 4100	.089 n = 3346
230	How many athletic teams have you been a member of in the last 3 years? (1 = none 12 = eleven or more)		.069 n = 3351
241	How many different times have you been sick in bed in the past year? (1 = none 6 = nine or more)		.070 n = 3371
246	Average number hours of sleep per night (1 - about six or less 6 = about eleven or more)	-.069 n = 4078	

Table 1 (contd)

Project TALENT Data Bank Variable Number	Variable	Correlation with Criterion Variable	
		Male	Female
Student Information Blank Number			
247	How late up on weekends (1 = 9 P.M. or earlier 6 = 2 A.M. or later)	.093* n = 4064	.084* n = 3357
259	Normal use of both legs (1 = yes 2 = no)	-.073 n = 4076	
294	Average number of time a week driven car during past school year? (1 = none 6 = ten or more)	.140* n = 3923	.213* n = 3263
295	Do you have a car of your own? (1 = yes 2 = no)	-.079 n = 3945	-.114 n = 3283
313	Reasons for attending college: I enjoy learning. (1 = extremely important 6 = not a reason)	.075 n = 3723	
385	Percent of college expenses from loans from family, friends (1 = 0 percent 6 = 100 percent)		-.064 n = 1905
393	Where do you expect to live while attending college? (1 = at home with my family 2 = in a dormitory)		-.067 n = 1451
Follow-up #35	Access to a car	.266* n = 4420	.320* n = 3538

Table 1 (contd)

Project TALENT Data Bank Variable Number	Variable	Correlation with Criterion Variable	
		Male	Female
P * 801	Socio-economic-education index	.088 n = 4254	.101* n = 3422
Information Test:			
R-112	Mechanics	.102* n = 4360	
R-235	English: Effective expression		.071 n = 3503
R-260	Creativity		.062 n = 3475

[a]The variables can be operationally defined by referring to Flanagan, et al (1965) The Project TALENT Data Bank for tests names and Flanagan, et al (1964) pages 5-6 to 5-35 for the Student Information Blank (SIB) items.

*Variables significant at the .01 level or beyond.

Table 2

Significant Correlates With Driver Training

(1 = yes vs. 3 = No, but course is available)

Project TALENT Data Bank Variable Number	Variable	Correlation with Criterion Variables	
		Male	Female
12 grade Follow-up #30	Accidents (1 = non-accident group 2 = accident group) (not significant)	-.009 n = 3928	-.053 n = 3271
Student Information Blank			
10	Military or drill units (1 = extremely active 6 = not a member)	-.070 n = 3832	
38	How often delivered newspapers, mowed lawns, baby-sitted, done house cleaning, etc. for pay? (1 = very often 5 = never)		.063 n = 3213
94	Age at starting first grade (1 = 4 years or younger 6 = nine years or older)	.077 n = 2993	
100	Semesters Social Studies (1 = none 6 = five or more)		-.065 n = 2499
136	Father's highest rank in military. (1 = enlisted 3 = officer)		.097 n = 520
163	Parents speak Hebrew or Yiddish (1 = very fluently 6 = doesn't speak)	.104* n = 2978	.113* n = 2489
170	Building in which you live (1 = one family house 5 = rooming house, hotel, or trailer)		-.092* n = 2384

Table 2 (contd)

Project TALENT Data Bank Variable Number	Variable	Correlation with Criterion Variables Male	Female
Student Information Blank			
292	Age at first learning to drive (1 = 13 or younger 5 = 17 or older	-.074 n = 2862	-.101* n = 2127
385	Loans for college expenses from other sources (family, friends) (1 = 0 percent 6 = 100 percent	.067 n = 1700	
391	How far from home is the college you expect to attend? (1 = within commuting distance 4 = more than 500 miles)	.079 n = 1414	
393	Where do you expect to live while attending college? (1 = at home with my family 2 = in dormitory)	.068 n = 1250	
Information Test			
R-105	Social Studies	-.070 n = 2996	
R-139	Accounting, business, sales	-.088* n = 2956	

Again the socio-economic-education dimension appears to some
extent and supports the findings of Shively and Asher (in press).
However, the number of significant variables is less than their
expectation and thus interpretations are open to question except
where other evidence is available to support them.

Indiana's high school students are evidently quite typical
of, and behave in the same manner as high school students from
across the United States. Of the 37 variables correlated
against residence in the state for both boys and girls only
12 significant relationships were found against an expected 37
or so. Indiana girls just may have a greater tendency to live
in dormitories when they go to college, not to enlist in a
branch of the military service, to take business courses, or not
to play baseball, football, or (heresy!) basketball than non
Indiana girls. Indiana boys may have slight tendencies not to
take science or foreign language courses, to take vocational shop
and agriculture courses, to live in slightly less expensive homes,
to know less literature, and to have siblings who drop out of high
school. But, since these detected relationships are so rare, a
reasonable explanation is that all are the rare products of
sampling from a universe in which the true relationship is zero.

This Indiana sample of 120 oversamples, by about a factor
of ten those who had automobile accidents. However, there are

non-significant correlations of -.016 for boys and .004 for girls

between residence in Indiana and accidents; therefore the

oversampling on this variable is of no importance for these

conclusions. (See Table 3)

Indiana students are a good, representative sample of

students in the United States.

The economic and social loss of automobile accidents is so

great in the United States (indeed throughout the world) that

almost every available opportunity to develop theory about this

phenomenon should be taken. This is particularly true in the

high incidence age groups of the late teens. Project TALENT

with its large data bank in terms of both numbers of students

and variables, is readily accessable and constitutes an almost

unexcelled opportunity to relate almost 500 variables to

significant accidents. Further, all but one of these variables

was collected prior to the accidents; therefore the data are

unobtrusive (Webb, et al, 1966), not possibly altered because of

the accident.

This particular project screened almost 400 of these variables

and found results at considerably greater than chance levels

although the magnitude of the relationships was not great. The

pattern still seems to be a negative relationship between a

social-economic-educational dimension and its correlates and

Table 3

Significant Correlates With Indiana And Non-Indiana

(Indiana = 1   Not Indiana = 2)

Project TALENT Data Bank Variable Number	Variable	Correlation with Criterion Variable	
		Male	Female

Student Information
Blank Number

27	Playing baseball, football or basketball (1 = very often 5 = never)		-.081* n = 3432
98	Semesters Science Courses (1 = none 6 = 5 or more	.066 n = 4189	
99	Semesters foreign language (1 = none 6 = 5 or more)	.064 n = 4188	
102	Semesters business or commercial courses (1 = none 6 = 5 or more)		-.077 n = 3349
103	Voc. shop or Ag. courses (1 = none 6 = 5 or more)	-.091* n = 4169	
172	Value of home (1 = under $6,000 5 = more than $22,000)	.069 n = 3311	
201	Number brothers or sisters who are high school drop-outs (2 = none 6 = 4 or more)	-.070 n = 3671	
230	Number athletic teams (1 = none 12 = 11 or more		.091 n = 3351
232	What do you expect to do about military service? (2 = quit high school and enlist 11 = never serve for other reasons)		-.137 n = 85

Table 3 (contd)

Significant Correlates with Indiana and Non-Indiana

(Indiana = 1   Not Indiana = 2)

Project TALENT Data Bank Variable Number	Variable	Correlation with Criterion Variable	
		Male	Female
393	Where do you expect to live while attending college? (1 = home 2 = dormitory)		-.083* n = 1451

Information Test

| R-103 | Literature | .064 n = 4362 | |

accidents, except where the economic status of the family is

such that it permits exceptionally high access to a car

(It must be recalled that in this age group these young adults

just graduated from high school generally cannot afford a car

of their own.) And, exposure to the hazard, as might be

expected, increases the probability of an accident. Thus,

staying up (and by implication, out) on weekends; being interested

in auto repairs; subscription to mechanics, electronic, and

automobile magazines; owning their own car, frequent driving

each week, and learning to drive early all are associated with

accidents. Not being well acclimated in school seems to be

another dimension that predicts accidents. Thus, failure to

pay attention in class, not doing their best work on assignments,

missing assignments, sloppy school work, inattention in class,

getting behind in assignments, and missing school all tend to

predict accidents.

CONCLUSIONS

1. With the driver as the significant contributor to automobile accidents, it would seem reasonable to continue to study human variables more.

2. One of the major ways of changing accident producing driver behavior will have to be through training and/or education.

3. An important time to present driver training is just before the late teens where the incidence of severe automobile accidents is high.

4. Current driver education and training courses are of no value in reducing significant accidents.

5. Driver training courses are taken by those who tend to learn to drive later than their peers.

6. The socio-economic education dimension and its correlates are among the most important predictors of accidents; the higher the subject on this scale, the fewer accidents. This holds true except where the family resources are of such magnitude as to give the subject very high access to a car.

7. Exposure to the hazard increases the probability of accidents. Such variables as staying up on weekends, interest in cars, frequent driving, and learning to drive early are indicators of this exposure.

8. Not being well acclimated in school is a predictor of accidents. Not paying attention, sloppy assignments, and inattention in class are variables defining this lack of school acclimitization.

9. Driver training courses tend to be taken by those of higher socio-economic-educational status.

10. Indiana's high school students are very similar to the rest of the high school students in the United States.

11. Indiana's high school students take driver training as frequently as students in the United States and have accidents with equal frequency.

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